1. A compound having a formula:

wherein:

R is an alkyl group having 6-20 carbon atoms or an alkyl group having 6-20 carbon atoms interrupted by at least one aromatic ring;

Z is a radical selected from the group consisting of - CH_2 -, -O-, -NH-, two of these radicals coupled together, and -CH=CH-;

Y is selected from -NH₂, O-CH₂-C₆H₅, and -CO-CO-O-CH₃; and n is 1 or 2.

- 2. The compound according to claim 1, wherein said alkyl group is a branched alkyl group.
- 3. The compound according to claim 1, wherein R is an alkyl group having 8, 10, or 12 carbon atoms.
- 4. The compound according to claim 1, wherein Z is not $-CH_2$ when R is an alkyl group having 12 carbon atoms, Y is $-NH_2$, and n is 2.
- 5. The compound according to claim 1, wherein Y is not -NH₂ when R is an alkyl group having 12 carbon atoms, Z is not -CH₂-, and n is 2.
- 6. A method of treating an animal with a microbially-based infection, comprising administering an effective amount of a compound of formula I to the human:

R-SO_n-Z-CO-Y

Ι

wherein:

R is selected from the group consisting of alkyl groups having 6-20 carbon atoms, unsaturated hydrocarbon groups having 6-20 carbon atoms, or alkyl groups having 6-20 carbon

atoms interrupted by at least one aromatic ring;

Z is a radical selected from the group consisting of $-CH_2$ -, $-CH_2CH_2$ -, [-O-O- remove], -NH-NH-, -O-, -NH-, -O-NH-, $-CH_2$ -NH-, $-CH_2$ -O-, -NH-O-, -NH-CH $_2$ -, -O-CH $_2$ -, and -CH=CH-;

Y is selected from the group consisting of -NH₂, -O-CH₂-C₆H₅, -CO-CO-O-CH₃, and -O-CH₄; and

n is 1 or 2.

- 7. The method of claim 6, wherein R is alkyl groups having 6-20 carbon atoms interrupted by an aromatic ring to give ortho-, meta-, or para-disubstitution.
- 8. The method of claim 6, wherein the microbially-based infection is caused by a microbial cell selected from the group consisting of corynebacteria, nocardiae, rhodococcus, and mycobacteria.
 - 9. The method of claim 6, wherein R is a branched alkyl group.
 - 10. The method of claim 6, wherein R is an n-alkyl group.
 - 11. The method of claim 6, wherein n is 1.
 - 12. The method of claim 6, wherein n is 2.
 - 13. The method of claim 6, wherein Z is $-CH_2$ -.
 - 14. The method of claim 6, wherein Y is $-NH_2$.
- 15. The method of claim 6, wherein: R is -(CH₂)₉-CH₃, n is 1, Z is -CH₂, and Y is -NH₂.

- 16. The method of claim 6, wherein: R is -(CH₂)₇-CH₃, n is 1, Z is -CH₂, and Y is -NH₂.
- 17. The method of claim 6, wherein R is selected from the group consisting of alkyl groups having 6-10 carbon atoms, unsaturated hydrocarbon groups having 6-10 carbon atoms, or alkyl groups having 6-10 carbon atoms interrupted by at least one aromatic ring.
- 18. The method of claim 6, wherein: R is -(CH₂)₉-CH₃, n is 2, Z is -CH₂-, and Y is -NH₂.
- 19. The method of claim 6, wherein: R is $-(CH_2)_7$ -CH₃, n is 2, Z is $-CH_2$, and Y is $-NH_2$.
- 20. The method of claim 6, wherein the microbially-based infection is caused by mycobacteria selected from the group consisting of *Mycobacteria tuberculosis*, drug resistant *M. tuberculosis*, *M. avium intracellulare*, *M. leprae*, and *M. paratuberculosis*.
- 21. The method of claim 6, wherein the microbially-based infection is caused by pathogenic *Mycobacteria sp.*
- 22. The method of claim 6, wherein the animal is selected from the group consisting of ruminants and horses.
- 23. The method of claim 22, wherein the ruminant is selected from the group consisting of sheep and cattle.
 - 24. The method of claim 6, wherein the animal is human.